CLAIMS

1. A power transmission comprising:

a transmission housing including a front end wall rotatably supporting an input shaft, a rear end wall rotatably supporting an output shaft, and a housing interconnecting said front end wall and said rear end wall;

a forward planetary gearset, a central planetary gearset, and a rearward planetary gearset disposed within said housing and axially aligned between said front and rear end walls, said forward planetary gearset having a planet carrier member continuously connected with a ring gear member of said central planetary gearset and a ring gear member continuously connected with a planet carrier member of said rearward planetary gearset and said output shaft, said central planetary gearset having a planet carrier continuously connected with a ring gear member of said rearward planetary gearset an a sun gear member continuously connected with said input shaft;

five torque-transmitting mechanisms disposed within said housing intermediate said front end wall and said rear end wall including a first torque-transmitting mechanism having a band member radially surrounding a hub at least a portion of which radially surrounds said rearward planetary gearsets adjacent said rear end wall;

four of said torque-transmitting mechanisms having friction disc structures disposed between said front end wall and said rearmost planetary gearset; and

said five torque-transmitting mechanisms being engaged in combinations of two to establish six forward speed ratios and one reverse speed ratio between said input shaft and said output shaft through said planetary gearsets.

2. The power transmission defined in Claim 1 further wherein:

three of said four torque-transmitting mechanisms having friction discs are positioned between said front end wall and said forward planetary gearset, and the fourth of said torque-transmitting mechanisms having friction discs is disposed between said forward planetary gearset and said central planetary gearset.

3. The power transmission defined in Claim 1 further wherein:

two of said torque-transmitting mechanisms having friction discs each have a servomechanism supported in said housing, and two of said torque-transmitting mechanisms having friction discs have servomechanisms supported in a hub connected with said input shaft and positioned axially between said forward and central planetary gearsets.

4. The power transmission defined in Claim 1 further wherein:

two of said torque-transmitting mechanisms have servomechanisms supported in said front end wall.

5. The power transmission defined in Claim 1 further wherein:

three of said torque-transmitting mechanisms having friction discs have servomechanisms supported by said front end wall.

6. The power transmission defined in Claim 1 further wherein:

four of said torque-transmitting mechanisms having friction discs have servomechanisms supported by said front end wall.

7. The power transmission defined in Claim 1 further wherein:

two of said torque-transmitting mechanisms having friction discs are stationary torque-transmitting mechanisms having servomechanisms supported on said housing substantially radially outboard of said forward planetary gearset, another of said torque-transmitting mechanisms having friction discs is a clutch having a servomechanism rotatably supported on said front end wall, and a further of said torque-transmitting mechanisms having friction discs is a clutch having a servomechanism supported in a hub between said forward planetary gearset and said central planetary gearset.